

ABSTRACT

An apparatus and method for maintaining a state during a power load change. The apparatus of one embodiment includes a voltage controller coupled to receive a signal from a detector of current change. The detector of current change in this embodiment is coupled to detect change in the current level at a microprocessor and signal a voltage controller of such change, which in turn causes a change in the voltage supplied to the microprocessor. An embodiment of the method comprises using a current detector in detecting current change in a microprocessor, determining according to the current change the power level that is needed to be maintained and increasing the voltage level for a predetermined amount of time to compensate for (any) voltage droop. In an alternative embodiment, a change in power is determined before the change occurs and as such determines the power level needed at the microprocessor.